

§ 173.001

Subpart D—Oceanographic Research

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AUTHORITY: 43 U.S.C. 1333; 46 U.S.C. 2113, 3306, 5115; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGD 79-023, 48 FR 51045, Nov. 4, 1983, unless otherwise noted.

Subpart A—General

§ 173.001 Applicability.

Each vessel that is engaged in one of the following activities must comply with the applicable provisions of this part:

- (a) Lifting.
- (b) Training (schoolship).
- (c) Oceanographic research.
- (d) Towing.

Subpart B—Lifting

§ 173.005 Specific applicability.

This subpart applies to each vessel that—

- (a) Is equipped to lift cargo or other objects; and
- (b) Has a maximum heeling moment due to hook load greater than or equal to—

$(0.67)(W)(GM)(F/B)$ in meter-metric tons (foot-long tons), where—

W=displacement of the vessel with the hook load included in metric (long) tons.

GM=metacentric height with hook load included in meters (feet).

F=freeboard to the deck edge amidships in meters (feet).

B=beam in meters (feet).

[CGD 79-023, 48 FR 51045, Nov. 4, 1983, as amended by CGD 85-080, 61 FR 945, Jan. 10, 1996]

§ 173.007 Location of the hook load.

When doing the calculations required in this subpart, the hook load must be considered to be located at the head of the crane.

§ 173.010 Definitions.

As used in this part—

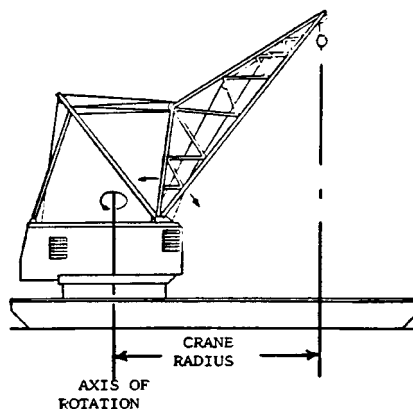
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(a) *Hook load* means the weight of the object lifted by the crane.

(b) *Crane radius* means the distance illustrated in Figure 173.010.

Figure 173.010

Crane Radius



§ 173.020 Intact stability standards: Counterballasted and non-counterballasted vessels.

(a) Except as provided in paragraph (c) of this section, each vessel that is not equipped to counter-ballast while lifting must be shown by design calculations to comply with this section in each condition of loading and operation and at each combination of hook load and crane radius.

(b) Each vessel must have a righting arm curve with the following characteristics:

(1) If the vessel operates in protected or partially protected waters, the area under the righting arm curve up to the smallest of the following angles must be at least 10 foot-degrees (3.05 meter-degrees):

- (i) The angle corresponding to the maximum righting arm.
- (ii) The downflooding angle.
- (iii) 40 degrees.

(2) If the vessel operates in exposed waters, the area under the righting arm curve up to the smallest of the following angles must be at least 15 foot-degrees (4.57 meter-degrees):

- (i) The angle corresponding to the maximum righting arm.
- (ii) The downflooding angle.